# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/808,811 | 03/25/2004 | Yoshinori Tanaka | FUSA 21.076 | 7590 |

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| EXAMINER |
|---|
| ROSE, KERRI M |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A  (Rev. 04/07)

| | Application No. | Applicant(s) |
| **Office Action Summary** | 10/808,811 | TANAKA ET AL. |
| | Examiner | Art Unit | |
| | KERRI M. ROSE | 2416 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on <u>26 May 2009</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) <u>45,47,49,51,53,55 and 56</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>45,47,49,51,53,55 and 56</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *  c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1.      A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection.  Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114.  Applicant's submission filed on 05/26/2009 has been entered.

### *Response to Arguments*

2.      Applicant's arguments with respect to claims 45, 47, 49, 51, and 53 have been considered

but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

3.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

4.      Claims 45, 47, 49, 51, 53, 55, and 56 are rejected under 35 U.S.C. 102(b) as being

anticipated by "Data Service Options for Spread Spectrum Systems: Radio Link Protocol Type

2," referred to herein as RLP2.

5.      In regards to claim 45, RLP2 discloses a transmitting apparatus (Section 1.2 defines the

terms base station and mobile station.  The base and mobile stations transmit and receive data

with one another.) capable of executing retransmission of packet data when the packet data

cannot be received correctly on a receiving side, said transmitting apparatus comprising:

A transmission parameter controller which changes a transmission parameter in accordance with conditions of a propagation path (Section 2.1 discloses parameters such as the transmission rate may change. Section 2.2.1 discloses methods for changing the parameters, such a requesting a rate reduction.); and

A controller which obtains a plurality of divided packet data by dividing packet data which has been transmitted and not been received correctly on the receiving side (Section 3.1.2 discloses requesting retransmission of unreceived data packets. Section 3.1.2 also discloses segmenting the packet data into as many as 3 part, as described in section 3.1.4, if necessary) and conducts retransmission of the plurality of divided packet data respectively based on the transmission parameter (Section 3.1.2 disclose the packet is divided and transmitted according to the transmission parameters in effect at the time of the retransmission, which may be different from those in effect at the time of the initial transmission.), wherein the packet data which has been transmitted and not been received correctly on the receiving side includes only a single number as number information of the packet data (Section 3.1.2 discloses setting the sequence number of each data frame to a unique number using the least significant 8 bits of L_V(S), shown in fig. 1 on page 3-7.), and each of the plurality of the divided packet data includes only a same and single number as number information of the packet data (Section 3.1.4 discloses using the same sequence number in each of the retransmitted divided data packets as was used in the original data packet.).

6.      In regards to claim 47, RLP2 discloses a transmitting method (Section 1.2 defines the terms base station and mobile station. The base and mobile stations transmit and receive data

with one another.) capable of executing retransmission of packet data when the packet data

cannot be received correctly on a receiving side, said transmitting method comprising:

Changing a transmission parameter in accordance with conditions of a propagation path

(Section 2.1 discloses parameters such as the transmission rate may change. Section 2.2.1

discloses methods for changing the parameters, such a requesting a rate reduction.); and

Obtaining a plurality of divided packet data by dividing packet data which has been

transmitted and not been received correctly on the receiving side (Section 3.1.2 discloses

requesting retransmission of unreceived data packets. Section 3.1.2 also discloses segmenting

the packet data into as many as 3 part, as described in section 3.1.4, if necessary) and conducts

retransmission of the plurality of divided packet data respectively based on the transmission

parameter (Section 3.1.2 disclose the packet is divided and transmitted according to the

transmission parameters in effect at the time of the retransmission, which may be different from

those in effect at the time of the initial transmission.), wherein the packet data which has been

transmitted and not been received correctly on the receiving side includes only a single number

as number information of the packet data (Section 3.1.2 discloses setting the sequence number of

each data frame to a unique number using the least significant 8 bits of L_V(S), shown in fig. 1

on page 3-7.), and each of the plurality of the divided packet data includes only a same and

single number as number information of the packet data (Section 3.1.4 discloses using the same

sequence number in each of the retransmitted divided data packets as was used in the original

data packet.).

7.       In regards to claim 49, RLP2 discloses a receiving apparatus (Section 1.2 defines the

terms base station and mobile station. The base and mobile stations transmit and receive data

with one another.) capable of executing retransmission of packet data when the packet data

cannot be received correctly on a receiving side, said receiving apparatus comprising:

A receiver which receives from the transmitter a plurality of divided packet data which

are obtained by dividing packet data which has been transmitted and not been received correctly

on the receiving side (Section 3.1.2 discloses requesting retransmission of unreceived data

packets. Section 3.1.2 also discloses segmenting the packet data into as many as 3 part, as

described in section 3.1.4, if necessary) and conducts retransmission of the plurality of divided

packet data respectively based on the transmission parameter (Section 3.1.2 disclose the packet is

divided and transmitted according to the transmission parameters in effect at the time of the

retransmission, which may be different from those in effect at the time of the initial

transmission.), wherein the packet data which has been transmitted and not been received

correctly on the receiving side includes only a single number as number information of the

packet data (Section 3.1.2 discloses setting the sequence number of each data frame to a unique

number using the least significant 8 bits of L_V(S), shown in fig. 1 on page 3-7.), and each of the

plurality of the divided packet data includes only a same and single number as number

information of the packet data (Section 3.1.4 discloses using the same sequence number in each

of the retransmitted divided data packets as was used in the original data packet.); and

Receiving data processing unit which conducts receiving process by using the number

information included in each of the plurality of divided packet data (Section 3.1.2, particularly

page 3-10, discloses how to process received data, including divided packet data.).

8.      In regards to claim 51, RLP2 discloses a receiving method (Section 1.2 defines the terms

base station and mobile station. The base and mobile stations transmit and receive data with one

another.) capable of executing retransmission of packet data when the packet data cannot be

received correctly on a receiving side, said receiving method comprising:

Receiving from the transmitter a plurality of divided packet data which are obtained by

dividing packet data which has been transmitted and not been received correctly on the receiving

side (Section 3.1.2 discloses requesting retransmission of unreceived data packets. Section 3.1.2

also discloses segmenting the packet data into as many as 3 part, as described in section 3.1.4, if

necessary) and conducts retransmission of the plurality of divided packet data respectively based

on the transmission parameter (Section 3.1.2 disclose the packet is divided and transmitted

according to the transmission parameters in effect at the time of the retransmission, which may

be different from those in effect at the time of the initial transmission.), wherein the packet data

which has been transmitted and not been received correctly on the receiving side includes only a

single number as number information of the packet data (Section 3.1.2 discloses setting the

sequence number of each data frame to a unique number using the least significant 8 bits of

L_V(S), shown in fig. 1 on page 3-7.), and each of the plurality of the divided packet data

includes only a same and single number as number information of the packet data (Section 3.1.4

discloses using the same sequence number in each of the retransmitted divided data packets as

was used in the original data packet.); and

Conducting receiving process by using the number information included in each of the

plurality of divided packet data (Section 3.1.2, particularly page 3-10, discloses how to process

received data, including divided packet data.).

9.      In regards to claim 53, RLP2 discloses a mobile communication system including a

receiving apparatus and a transmitting apparatus (Section 1.2 defines the terms base station and

mobile station. The base and mobile stations transmit and receive data with one another.)

capable of executing retransmission of packet data when the packet data cannot be received

correctly on a receiving side, said mobile communication system comprising:

A transmission parameter controller which changes a transmission parameter in

accordance with conditions of a propagation path (Section 2.1 discloses parameters such as the

transmission rate may change. Section 2.2.1 discloses methods for changing the parameters,

such a requesting a rate reduction.); and

A controller which obtains a plurality of divided packet data by dividing packet data

which has been transmitted and not been received correctly on the receiving side (Section 3.1.2

discloses requesting retransmission of unreceived data packets. Section 3.1.2 also discloses

segmenting the packet data into as many as 3 part, as described in section 3.1.4, if necessary) and

conducts retransmission of the plurality of divided packet data respectively based on the

transmission parameter (Section 3.1.2 disclose the packet is divided and transmitted according to

the transmission parameters in effect at the time of the retransmission, which may be different

from those in effect at the time of the initial transmission.), wherein the packet data which has

been transmitted and not been received correctly on the receiving side includes only a single

number as number information of the packet data (Section 3.1.2 discloses setting the sequence

number of each data frame to a unique number using the least significant 8 bits of L_V(S),

shown in fig. 1 on page 3-7.), and each of the plurality of the divided packet data includes only a

same and single number as number information of the packet data (Section 3.1.4 discloses using

the same sequence number in each of the retransmitted divided data packets as was used in the

original data packet.);

A receiver which receives the plurality of divided packet data (Section 3.1.2 discloses requesting retransmission of unreceived data packets. Section 3.1.2 also discloses segmenting the packet data into as many as 3 part, as described in section 3.1.4, if necessary); and

A receiving data processing unit which conducts receiving process by using the number information included in each of the plurality of divided packet data (Section 3.1.2, particularly page 3-10, discloses how to process received data, including divided packet data.),

Wherein the transmitting apparatus includes the transmission parameter controller and the controller and the receiving apparatus includes the receiver and the receiving data processing unit (Inherent. In order for the base station mobile station system to perform the processing disclosed in RLP2, the transmitter must contain at least the two controllers and the receiver must contain at least the processing unit. Without the proper hardware the method described in RLP2 cannot be completed.).

10.     In regards to claim 55, RLP2 discloses the transmitting apparatus according to claim 45, wherein in a case where the conditions of the propagation path at the time of retransmission are inferior to those the prevailed at a time of the previous transmission the transmission parameter controller changes the transmission parameter and the controller obtains a plurality of divided packet data by dividing said packet data and conducts retransmission of the plurality of divided packet data respectively based on the transmission parameter (Section 3.1.4 discloses retransmitting the data packet without division if the transmission parameters are the same or better than those that were prevailing during the initial transmission. If, however, the conditions are inferior the data packet is divided into as many as 3 sub packets, as required by the new prevailing conditions, and then retransmitted using the new transmission parameters.).

11.     In regards to claim 56, RLP2 disclose the transmitting apparatus according to claim 45,

wherein in a case where the transmission parameter controller does not change the transmission

parameter the controller conductions retransmission of said data packet as it is (Section 3.1.4

discloses retransmitting the data packet without division if the transmission parameters are the

same or better than those that were prevailing during the initial transmission.).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KERRI M. ROSE whose telephone number is (571) 272-0542.

The examiner can normally be reached on Monday through Thursday, 6 am - 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Aung MOE can be reached on (571) 272-7314.  The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system.  Status information for published applications

may be obtained from either Private PAIR or Public PAIR.  Status information for unpublished

applications is available through Private PAIR only.  For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/Kerri M Rose/
Examiner of Art Unit 2416